

Health Workforce NEWSLINK

A Review of HRSA's
Bureau of Health
Professions Research
and Analysis Activities

Volume 1 Number 2

Fall 1995

PHYSICIAN, NURSE EDUCATION GROUPS MEET ON PRIMARY CARE

The first joint meeting between two national advisory councils representing physicians, nurses, nurse practitioners (NPs), and certified-nurse midwives (CNMs) was held September 26-27, 1995 in Bethesda, Maryland. The two groups -- the Council on Graduate Medical Education (COGME) and the National Advisory Council on Nurse Education and Practice (NACNEP) -- agreed to jointly examine integrated workforce requirements for primary care providers (NPs, CNMs, PAs, physicians) in order to meet the future health care needs of Americans. Both COGME and NACNEP advise the Federal government on a variety of issues involving the education and practice of primary care providers.

COGME was authorized by the Congress in 1986 to advise Congress and the Secretary of DHHS on federal policy regarding physician supply and issues surrounding graduate medical education (GME). Now in its tenth year, COGME is publishing its fifth, sixth, seventh, and eighth reports that address women in medicine, the impact of managed care on the physician workforce, financing of GME, and workforce supply and requirements. The NACNEP was established under the Public Health Service Act on September 4, 1964 as the Advisory Council on Nurse Training. The NACNEP was renamed the Advisory Council on Nurses Education in 1988, and finally renamed the "National

Advisory Council on Nurse Education and Practice" in 1992. NACNEP advises the Secretary of DHHS on matters related to nursing education and practice to enhance the health of the public through development of the nursing workforce.

Until recently, most health care workforce planning has been carried out individually by professional groups. This current collaboration of leaders who represent a wide range of primary care providers promises to change that picture. Involvement of these prestigious government-sponsored councils is needed to provide guidance in this new era of health care delivery. The expertise of both COGME and NACNEP members is crucial in guiding the kind of education and training that is necessary to address emerging trends in primary care.

In the spring of 1994, both Councils agreed to participate in a joint effort which began a landmark process of examining together the national requirements for primary care practitioners. A joint Workgroup on Primary Care Workforce Projections was formed which included representatives from both Councils. The joint Workgroup has advised a Bureau contractor who has developed a computer-based analytic model that estimates integrated requirements of NPs, CNMs, PAs, and physicians for delivery of primary care health care services. The model provides estimates under six scenarios, each with different assumptions about insurance coverage, managed care penetration, and

use of non-physician providers. The user-friendly personal computer implementation is designed so that requirements can be forecast under an unlimited number of scenarios by varying the model parameters. The joint Workgroup has assisted in developing alternative assumptions and scenarios, advising on the model's parameters, and reviewing interim products.

The joint Workgroup prepared a draft report which was discussed at the joint Councils' meeting. The draft report recommends that the Federal government continue to recognize the national significance of interdisciplinary workforce planning and development. Some specific recommendations include that the Federal government: (1) Support and conduct both discipline-specific and interdisciplinary workforce planning activities that examine health personnel requirements and their implications for the supply of each key primary care discipline; (2) Support ongoing study of the utilization of and interaction among health care providers and the implications of these research findings for future workforce development; (3) Support the ongoing collection and analysis of key demographic, health care utilization, and overall health services development data to enable the critical updating and validation of the iterative integrated primary care workforce modeling developed by the Bureau; (4) Support collaborative work with and technical assistance to States, regional bodies, research and educational institutions, and professional organizations to foster the development of integrated primary care workforce planning; (5) Foster the development of both discipline-specific and interdisciplinary educational strategies that enhance

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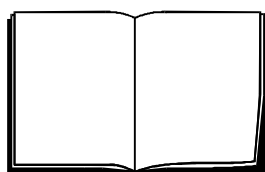
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the function of collaborative, primary care teams; and (6) Develop discipline-specific plans to help guide the production of new health professionals, recognizing the importance of responding to workforce requirements.

The joint body also recommended that the respective national advisory councils continue, jointly and/or individually, to address: (1) The overlapping and unique roles of physicians, nurses, and physician assistants in the delivery of primary care in the emerging health care system; (2) The impact of physician specialist practice on the overall primary care workforce; (3) The role of individual providers, the patient, and the family in the delivery of primary care in team approaches; and (4) The importance of improved mechanisms for enhancing the racial and ethnic diversity in the primary care workforce.

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PUBLICATION **CORNER**

MEDICARE FUNDING FOR NURSE EDUCATION

(Aiken L, Gwyther M. JAMA 1995; 273(19):1528-32)

In 1960, more than 900 hospital-based nurse diploma programs produced 83% of the nation's nurses; by 1991, only 145 diploma programs remained in operation, producing less than 10% of graduates. In 1991, 71% of the \$174 million of Direct Medicare funding for the training of nurses and paramedical personnel went to hospitals for nursing education costs. Sixty-six percent of these dollars, totaling \$114 million, went to the 145 hospitals operating diploma programs. Significantly, therefore, Medicare funding has become a source of unrestricted support for an increasingly smaller subset of hospital-based nursing programs that lie outside the mainstream of health professions education. This funding is at odds

with national health care workforce priorities which identify future shortages of nurses trained at the graduate and baccalaureate levels for roles in out-of-hospital settings. Such programs receive little support from Medicare.

In sum, 65% of all new nurses are trained at the less than baccalaureate level, despite evidence that nurses' roles will be more complex and demanding. Graduate level clinical education and baccalaureate level education are appropriate targets for

Medicare and other Federal and non-Federal sources of support, consistent with the needs of the nurse workforce of the future.

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STATE LEGISLATIVE STRATEGIES AND THE PHYSICIAN WORKFORCE

(Rivo M, Henderson T, Jackson D. American Journal of Public Health 1995; 85(3):405-7)

State laws enacted between 1985 and 1992 were reviewed to examine state involvement in influencing the supply and distribution of generalist physicians. Forty-seven states enacted 238 relevant laws during this period. In 1991 and 1992, 36 states enacted 98 laws, as compared with 1985 and 1986 when 8 states enacted 12 laws. Legislation addressed planning and

oversight; financial incentives to institutions, students, and residents; and strategies to enhance the practice environment. A common new strategy developed by states includes linking funding to measurable outcomes, such as the career choices of a state's medical school graduates. Few states devoted resources to evaluate their efforts, however.



THE DEVELOPMENT OF FAMILY PRACTICE AROUND THE WORLD

(Haq C, Ventres W, Hunt V, Mull D, Thompson R, Rivo M, Johnson P. Academic Medicine 1995; 70(5):370-80)

Family physicians are generalists trained at the postgraduate level to address the majority of primary care needs of patients of all ages in communities they serve. Throughout the world, there is a need for family physicians to serve as

cornerstones of comprehensive health care systems that provide high-quality, cost-effective medical and public health services to the entire population. To meet this need, each country must value and adequately finance essential medical and public health services and provide family physicians with appropriate training and education which focuses on the relevant health problems of the

population being served. The authors presented an overview of the status of this training and education throughout the world, and suggested strategies for its successful development. Illustrative case studies of South Korea, Venezuela, and Pakistan were included.

FACTORS INFLUENCING MEN AND WOMEN PHYSICIAN SPECIALTY CHOICES

(Xu G, Rattner S, Veloski J, Hojat M, Fields S, Barzansky B. Academic Medicine 1995; 70(5):398-404)

Despite a recent increase in the percentage of U.S. medical students planning to pursue generalist careers, interest is still far below what it was in the early 1980s, and falls well short of the stated goal of the Association of American Medical Colleges and others that half of all graduates should choose generalist careers. During the past decade, the number of women students and physicians also has increased. Given growing concerns about the generalist workforce, it is important and timely to examine the relationship between gender and other factors that influence the decision to enter primary care.

This study selected and surveyed 1,038 men and 558 women generalist physi-

cians who represented the 1983 and 1984 graduates of allopathic U.S. medical schools. Gender comparisons were made on 19 variables that influenced the physicians' decisions to enter generalist specialties and on the six factor scores derived from a factor analysis of these 19 variables. Also included in the gender comparisons were characteristics of practice, population served, timing of the decision to enter generalist careers, and personal demographic information.

Overall, the study revealed that medical school experience and personal values were two important factors. The results also showed that men, more than women, were influenced to become generalists by early role models. Women, more than men, were influenced by personal and family factors. There was no gender difference regarding place of origin, family income

as a child, timing of the decision, or amount of educational debt. The study concluded that men and women physicians differed in their perceptions of the relative importance of factors that influenced them to become generalists, and that these differences should be targeted in the development of successful strategies to attract students into generalist careers.

An earlier publication of general findings of this research appeared in the Journal of the American Medical Association (Martini C, Veloski J, Barzansky B, Xu G, Fields S. 272:661-8).

MEDICAL EDUCATION ABOUT SUBSTANCE ABUSE

(Fleming M, Barry K, Davis A, Kropp S, Kahn R, Rivo M. Academic Medicine 1994;69(5):362-9)

Substance abuse is one of the most common problems encountered by generalist practitioners. It is as common as hypertension. While neither the medical school accreditation process nor any of the medical specialty certification boards require teaching about substance abuse, there has been an effort over the previous two decades to increase the teaching in this area. The authors examined changes in substance abuse education in U.S. medical schools by

conducting a survey of six clinical departments in each of the 126 allopathic medical schools. Previous surveys conducted by the Liaison Committee on Medical Education and others provided baseline data for comparison.

Significant increases in the number of required and elective units in substance abuse education have been reported since 1986-87. The number of schools requiring courses rose from five to eight during the period. For residents in family practice and pediatrics, there were significant increases in the number

of curriculum units. Some 45 fellowships in addiction medicine were offered in the most recent year, with a total of 61 fellows in training. The authors concluded that while the findings confirm positive change, the amount of time and number of faculty with expertise in substance abuse education do not compare well with curriculum time and numbers of faculty involved in clinical problems of similar prevalence such as cancer and heart disease.



NEW LOAN FINANCING HELPS CHIROPRACTIC

**(Clum D. ICA International Review
of Chiropractic 1995; May/June:10-
12)**

In 1993, almost 3,000 chiropractic students borrowed money through the Federal government's Health Education Assistance Loan (HEAL) program to help subsidize their education. The average HEAL debt of chiropractic borrowers is about \$17,000, but many borrow more. Chiropractors currently owe about \$400 million in HEAL loans. Over the history of chiropractic involvement with the HEAL program, the government has been forced to take legal and administrative steps in response to borrowers who are not repaying their

loans in a timely fashion. The government has a new program that can prevent such default and litigation among chiropractic borrowers. This year-old program is called HEAL Refinancing and is open to those who have more than one HEAL loan. Refinancing offers lower interest rates, different repayment options, and a new deferment period and extended time to make the total payment. Despite all these benefits, fewer than 1,600 chiropractors have taken advantage of the program.

NEWS BRIEFS

DEPARTMENT PUBLISHES ITS NINTH REPORT ON HEALTH PERSONNEL

Legislation enacted in the 1970s requires the Secretary of the Department of Health and Human Services (DHHS) to submit periodic reports to the Congress on the status of the health personnel supply, distribution, and requirements needed to provide adequate health care for the nation. The current report is the ninth in a series of biennial reports that have been prepared by the Bureau and have spanned more than two decades. This report identifies and discusses some of the universally important health care issues that are expected to affect the delivery of health care and the demand for health personnel. It presents information and data on the professions of medicine, dentistry, nursing, physician assistants, allied health, public health, pharmacy, optometry, podiatric medicine, chiropractic, clinical psychology, clinical social work, and veterinary medicine.

The health care system is being fundamentally altered as the nation struggles to reduce costs while maintaining quality and in some areas expanding care. Undoubtedly, any change in the

health care delivery system will also have an impact on the personnel who provide health services. Some of the issues discussed include: the declining interest in primary care careers; barriers to practice for nurse practitioners, certified nurse midwives, and physician assistants; minority representation and minority health concerns; rural health personnel; nurse workforce issues; and the varying health care needs of persons with AIDS. This ninth report also discusses occupation-specific issues that are affecting or could affect an occupation's contribution to health care delivery. This publication draws upon the detailed data on health care personnel that appeared in a companion publication entitled, Factbook: Health Personnel, United States.

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BUREAU STREAM- LINES GRANT PRO- CESS

The Bureau has made several recent changes to streamline and improve the administration of its grant programs, including: (1) Expanded authority for grantees to approve a number of administrative actions which previously required Bureau approval in the areas of pre-award costs, cost-related prior approvals, carryover of unobligated balances, and extensions without additional funds of final budget periods; (2) An annual progress report will be used in lieu of the Application for Continuation Training Grants for determining continued funding of the second or subsequent budget period without a previously approved project period; (3) The Bureau's bulletin board will be used for announcing application receipt dates and distributing application and progress report deadlines; (4) Institutions have identified an authorized official to serve as a single point of contact for all business management activities between the Bureau and its grantees; (5) A central unit is being established to carry out the review of all competitive applications for grants and cooperative agreements. Additional improvements such as further automation of the grants process and electronic submission of final reports are under active consideration.

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NEWS BRIEFS *continued*

SAMHSA CONVENES NATIONAL TRAINING STRATEGY MEETING

The Substance Abuse and Mental Health Services Administration's (SAMHSA) Center for Substance Abuse Treatment (CSAT) and Center for Substance Abuse Prevention (CSAP) jointly planned and convened a June 22-23 conference to outline a vision for a coordinated national training strategy for the substance abuse field. The purpose of the training strategy is to collectively advance the competence and effectiveness of substance abuse prevention and treatment providers in this country.

Nearly 40 participants across the country represented diverse substance abuse interests, from Federal and State agencies to professional

associations and related fields such as mental health and criminal justice. Pervading the proceedings was a sense of urgency, given the national climate of economic change in the provision of health care services and the need for substance abuse services to become integrated into managed care programs.

One of the principal outcomes targeted was exploration of a unique Federal role in training of substance abuse professionals. The final recommendations focused primarily on the unique roles of CSAT and CSAP. The top four of twelve recommendations called on the

agencies to: sponsor research and technology transfer, provide leadership in managed care training initiatives, overcome duplication in training activities, and coordinate public and private training activities. The recommendations currently are being reviewed by CSAT and CSAP. The full conference report will be available in the early fall.

For further information: Nancy Kilpatrick, CSAT, SAMHSA; PH: 301-443-8831 / FAX: 301-480-3144 / email: nkilpatr@aoarw2.ssw.dhhs.gov

PREVENTION IN MEDICAL EDUCATION FOR YEAR 2000

Recommendations were recently generated to strengthen disease prevention and health promotion as integrated components of undergraduate medical education at the "Prevention In Medical Education for the Year 2000" Conference held on July 26-28.

The primacy of managed care in our rapidly evolving health care system makes the role of disease prevention/health promotion more essential in physician training than ever before, a theme echoed by both the President of Group Health Association of America and the Deputy Assistant Secretary for Health. Other conference speakers noted the importance of prevention in health professions training in addressing top risk factors for death and disease.

Among major recommendations developed at this national meeting were: (1) Principles of disease

prevention/health promotion should be integrated throughout the basic science and clinical years; (2) Each medical school should have a department of preventive medicine or other identifiable administrative unit that is responsible for the overall organization and teaching of disease prevention/health promotion at the institution; (3) National medical licensing examinations should include enhanced and expanded questions related to disease prevention/health promotion; (4) A standard for teaching preventive medicine should be developed and applied in the accreditation of medical schools; and (5) An updated inventory of the skills and knowledge related to disease prevention/health promotion should be universally disseminated.

Conference participants represented schools of medicine and public

health, Federal agencies, licensing and accrediting bodies, managed care organizations, foundations, and professional societies and associations. The Conference was co-sponsored by the Association of Teachers of Preventive Medicine, the American Association of Medical Colleges, HRSA/BHPr, the Centers for Disease Control and Prevention, and the Federal Office of Disease Prevention and Health Promotion.

For further information: Dr. D.W. Chen, BHPr; PH: 301-443-6853 / FAX: 301-443-1164 / email: dchen@hrsa.ssw.dhhs.gov; or RoseMarie Matulionis, ATPM; PH: 202-463-0550 / FAX: 202-463-0555

NEWS BRIEFS *continued*

VACCINE INJURY COMPENSATION PROGRAM PUBLISHES COMMON QUESTIONS

In May 1995, the Department of Health and Human Services' (DHHS) National Vaccine Injury Compensation Program (VICP) published a document entitled, "Commonly Asked Questions..." about the program. The National Childhood Vaccine Injury Act of 1986 established the VICP, a Federal "no-fault" system designed to compensate those individuals, or families of individuals, who have been injured by childhood vaccines, whether administered in the private or public sector. A claim may be made for any injury or death thought to be a result of a covered vaccine

(including diphtheria, tetanus, pertussis, measles, mumps, rubella, and polio). The injured individual, or a parent, legal guardian, or trustee on behalf of a child or an incapacitated person may file such a claim. This program is jointly administered by the U.S. Court of Federal Claims, the DHHS, and the Department of Justice.

As of the writing of this pamphlet, over 4,800 petitions had been filed, nearly three-quarters of which were for the DPT vaccine (diphtheria, tetanus, pertussis) or its components. This program protects vaccine administrators and manufactur-

ers by requiring claims for covered vaccines to be filed with the VICP before civil litigation can be pursued through the tort system. If the petitioner accepts a VICP award, the claim cannot be brought subsequently to the tort system. The manufacturer is also protected by the more restrictive standards set in the legislation for actions alleging injury for those cases actually introduced into the tort system.

**For more information:
VICP;PH:1-800-338-2382.**

COGME RELEASES ITS FIFTH REPORT

The Council on Graduate Medical Education (COGME) recently reviewed issues concerning education on women's health care and women representation in medicine. The Council's Fifth Report "Women and Medicine" was approved at its January 25-26 meeting and contains findings and recommendations which should bring more attention to gaps in current education and practice in women's health. The Report also helps identify the difficulties women encounter in achieving leadership status in the medical profession.

General findings recognize that

women have unique health care needs throughout their life span, that demographics and socioeconomic status affect women's health, and that women often receive fragmented and uncoordinated care. Additional findings note that changes are needed in medical education and gender inequalities in research have hampered consideration of women's health needs.

Findings regarding the physician workforce note the effects of the increasing numbers of women physicians, their limited numbers in leadership positions, their concentration in self-selected

specialties, and the continued effects of gender-bias and sexual harassment in the medical field.

A total of 31 recommendations are presented, offering ways to improve the delivery of consistent, preventive health care to women and eliminate the barriers for women in the physician workforce.

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NEWS BRIEFS *continued*

IOM REPORTS ON FUTURE OF DENTAL EDUCATION

The Institute of Medicine (IOM) recently released its long-awaited report, "Dental Education at the Crossroads." The report was funded by several private and public organizations including HRSA/BHPr, National Institutes of Health/National Institute of Dental Research, and the American Fund for Dental Health.

The IOM study was prompted by concerns and challenges confronting dental education. The intent of the study was to "assess dental education in the United States and make recommendations regarding its future." The recommendations emphasize that the future of dental education is necessarily connected to its contributions to improving the effectiveness and efficiency of oral health services through education, research, and patient care. For dental education to meet the challenges that lie ahead, support and involvement from the practitioner community, researchers, and policy makers are needed. Highlights from the 22 recommendations include: (1) Dental educators should work with public and private organizations to use scientific evidence, outcomes research, and a formal consensus process in

devising practice guidelines; (2) Dental practitioners, researchers, and public health officials should work together to address the special needs of underserved populations through health service research, curriculum content, and productive use of allied dental personnel; and (3) Postdoctoral education in general dentistry or specialty programs should be available for every dental graduate, and should be achieved in five to ten years. This study also noted that emphasis should be placed on new positions in advanced general dentistry and discouraging additional specialty residencies, unless service shortages cannot be met effectively by other personnel.

For further information: Dr. Rosemary Duffy, BHPr; PH: 301-443-6853/FAX: 301-443-1164/ email: RDuffy@HRSA.SSW.DHHS.GOV; or Marilyn J. Field, Ph.D., IOM; PH: 202-334-2360/FAX: 202-334-3862. To order the publication call: 1-800-624-6242.

100 YEARS OF CHIROPRACTIC PRACTICE CELEBRATED

The International Chiropractic Centennial Conference was held at the Washington, D.C. Convention Center from July 5-9. This year's event, which celebrated the 100 year history of chiropractic practice, included 400 representatives from Australia, Asia, and Europe as well as practitioners, educators, and clinical researchers from the United States. Sixteen U.S. schools of chiropractic, including those funded under the Bureau Chiropractic Demonstration Project Grants program, were among the cosponsors of the Conference.

Meeting participants attended Conference plenary sessions, exhibitions, and workshops. Of particular interest were sessions presented by Bureau grantees

which focused on advancements in research and treatment of spinal and lower-back conditions, projects conducted in close collaboration with national school(s) of osteopathic and allopathic medicine. Bureau staff addressed the plenary session regarding Federal funding opportunities in chiropractic research.

For further information on the Conference, upcoming events in the chiropractic community, and the Chiropractic Demonstration Projects Grants program: Ms. Shannon Mulrooney, BHPr; PH: 443-6763/ FAX: 301-443-1164/ email: smulroon@hrsa.ssw.dhhs.gov

HEALTH DATA INITIATIVES 1996: NAHDO TENTH ANNUAL MEETING

The National Association of Health Data Organizations (NAHDO) is sponsoring a conference entitled, "Health Data Initiatives 1996: Health Data and Information for the 21st Century" on November 16-17, 1995 at the Omni Shoreham Hotel, Washington, D.C.

NAHDO brings together researchers, payers, employers, providers, consumers, business coalitions, policy-makers, standards setting organizations, representatives from managed care, and experts in confidentiality, electronic data transfer, and quality to share ideas and experiences on uses of health information to address today's complex health care issues. This conference will offer timely information and viewpoints on the future, as well as current approaches for using health data. NAHDO has assembled a faculty of health information experts including the National Library of Medicine Director, Dean of the University of Pennsylvania School of Nursing, Vice President for Performance Development of the National Committee on Quality Assurance, Assistant Secretary for Health Information of Washington State Health Department, and the Director of the National Health Policy Forum.

For more information: NAHDO, 254-B North Washington Street, Falls Church, VA 22046; PH: 703-532-3282; FAX: 703-532-3593.

FUNDED RESEARCH

WEB OF ORGANIZATIONS RESPONSIBLE FOR STATE ENVIRONMENTAL HEALTH

The goal of this project was to describe the structure, functions, and funding of State environmental health and protection services. The Environmental Web is a widely distributed report by Dr. Thomas A. Burke of Johns Hopkins which examines the impact of 10 major Federal environmental statutes on the organization of the environmental infrastructure in 50 States.

The investigation revealed an "environmental web" of organizations responsible for environmental health and protection with public health departments remaining as the lead environmental agency in only 8 States. Concomitantly, the majority of State environmental health professionals no longer work in traditional public health agencies (PHAs), but in environmental regulatory agencies.

Although the Federal statutes are clearly the driving force in the organization of State environmental infrastructure, there is no uniformity in the way States are organized to implement major Federal environmental statutes. The trend is toward mini-Environmental Protection Agencies (EPAs) with regulatory activities such as permitting, enforcement, record keeping, remediation, standards setting, and laboratory support, and away from traditional PHAs. However, health departments continue to have the most diverse responsibilities such as

health surveillance, environmental epidemiology, applied research, and toxicology, as well as permitting, monitoring, and enforcement. These findings may indicate that "environmental fragmentation" noted in the Institute of Medicine study, The Future of Public Health, may be more appropriately termed "environmental diversification."

Finally, the report revealed that \$5.7 billion annually was spent by States for environmental health and protection services (\$4.7 billion for regulatory purposes, \$1 billion for environmental health). If natural resource expenditures are included for FY 92-94, only 8 cents of every dollar is directed toward environmental health activities, only 3-4% of total State spending on health.

For further information:
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SPH;PH:410-955-1604/FAX
614-2797.

TAKING CHARGE OF THE FUTURE: 106TH AAMC ANNUAL MEETING

The Association of American Medical Colleges (AAMC) will hold its 106th annual meeting October 27 to November 2, 1995 at the Washington and Capital Hilton Hotels in Washington D.C. In addition to its presentation of awards and guest lectures, the AAMC is offering sessions on preparing medical students and their teachers for managed care, rural health and the changing health care environment; maintaining or assuring public trust amid a perception of scientific misconduct; marketing academic medicine within an integrated delivery system; training tomorrow's physicians to provide health care for women; improving medical student education about domestic violence; developing a care team model for academic medicine; and fostering ambulatory care education. The annual meeting will feature sessions on research in medical education and financial aid, including presentations by the HRSA/Bureau-sponsored Centers for Medical Education Research at the Universities of Washington and North Carolina.

For more information:
AAMC Annual Meeting
Registrar, 2450 N Street NW,
Washington, D.C. 20037-
1127;PH:202-828-0415

FUNDED RESEARCH *continued*

FACTORS AFFECTING PA's CHOICE OF SPECIALTY AND PRACTICE LOCATION

The purpose of this study was to examine those factors which influenced physician assistant (PA) graduates (1991-93) in their specialty and practice location choices. The study examined responses of 1,472 PAs and identified nine factors which influenced PAs to choose a specialty in their first practice year. The most important of the nine was identified as "intellectual content of the specialty." "Technical orientation" followed as the second most important factor. (PAs who chose nonprimary care specialties rated this latter factor as most influential.) PAs who chose primary care specialties gave more weight to "prevention, academic environment, debt, intellectual content, peer influence and

lifestyle" than the nonprimary care group. Nonprimary care PAs gave more weight to "income/employment."

Six factors were identified as influencing practice location decisions. State laws and family considerations positively influenced primary care PAs while location characteristics and employment opportunities influenced nonprimary care PAs.

For more information: Dr. Ruth Kahn, BHP; PH:301-443-6785/ email:rkahn@hrsa.dhhs.ssw.gov; or American Academy of Physician Assistants; PH:703-836-2272.

INTERNATIONAL GENERALIST/ SPECIALIST DISTRIBUTION

This study provided information on medical education and the physician workforce in England, France, and Germany and compared these results with the United States. The generalist/specialist distribution of the physician workforce, practice incentives, and a synopsis of the health care delivery systems were topics addressed. In comparison to earlier studies of physician supply and specialty distribution, this study revealed that the percent of generalist physicians in these countries was lower than previously estimated, and for Germany was not considerably higher than that which prevails in the United States. Generalist education and competency of generalist practitioners in these countries were discussed, as

well as status of physician workforce policy and planning. The results of this study were published in the September 6 issue of the Journal of the American Medical Association.

For more information: Ms. Sandra Gamliel, BHP; PH:301-443-6662/FAX:301-443-8003/ email:sgamliel@hrsa.ssw.dhhs.gov; or Dr. Michael Whitcomb, Association of American Medical Colleges; PH:202 828-0505/ FAX:202 828-1125

BUREAU RELEASES REPORT ON QUALITY IMPROVEMENT APPROACHES TO INTERDISCIPLINARY HEALTH PROFESSIONS EDUCATION

A final report of the first of three HRSA supported projects for interdisciplinary health professions training in quality improvement is now available. The report, *Interdisciplinary Professional Education in the Continuous Improvement of Health Care: The State of the Art*, prepared by the Institute for Healthcare Improvement's Project Coordination Team, Linda A. Headrick, M.D., Case Western Reserve University School of Medicine, Linda Norman, R.N., M.S.N., Vanderbilt University School of Nursing, Sherril Gelmon, Dr.P.H., Portland State University, Department of Health Administration, and Marian Knapp, Institute of Healthcare Improvement, describes several early attempts to create interdisciplinary health professions education in quality improvement. From the results of projects designed to utilize teams of physicians, nurses, and health administrators in the experiential learning environment of community settings, key features in project initiation, core educational elements including faculty and curriculum development, and outcomes measures are identified. Potential barriers and strategies to overcome them are discussed and recommendations for health professions educators, government and private foundations, and local healthcare providers are included.

For copies of the report: Bernice A. Parlak, BHP; PH:301-443-6887/ FAX:301-443-1164/ email:bparlak@hrsa.ssw.dhhs.gov

FUNDED RESEARCH *continued*

STATE PRACTICE ENVIRONMENTS OF NURSE PRACTITIONERS AND PHYSICIAN ASSISTANTS PREDICT THEIR LOCATION

This study investigated State practice acts, rules, regulations, and policies governing scopes of practice of NPs and PAs in a sample of States selected to represent a diversity of practice environments. A literature review and discussions with experts on States' regulation of NPs and PAs in ten States concluded that: (1) There are significant differences among State practice acts, regulations, and rules that result in some States having more enabling practice environments; 2) Several States have

restrictive legal practice environments that limit the ability of NPs and PAs to practice to their full capability; (3) States that have favorable practice environments for NPs tend to have favorable environments for PAs and vice versa; 4) States with favorable practice acts tend to have more NPs or PAs per 100,000 residents; 5) The primary factors influencing practice environment are scope of practice, level of physician supervision, prescriptive authority, and ability to be directly reimbursed.

Non-regulatory factors also were examined. It was found that physicians, hospitals, other non-physician providers, and insurers also have an impact on practice environment quality.

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HOW DO HMOS MAKE THEIR STAFFING DECISIONS?

This study examined the decision-making processes that managers of HMOs use to determine staffing and services offered by their plans. Interviews with 23 HMOs revealed that the most influential factor in staffing and service decisions was the purchasers' requirement that services be available to their employees at convenient locations and delivered in a timely manner. Surprisingly, data on physician-to-enrollee ratios was of lesser importance in making staffing decisions,

and such information, by and large, was not even available for the independent practice arrangement (IPA) model HMO. The study also examined the differences in service mix and staffing among different HMO model types and compared staffing patterns of HMOs serving "traditional" versus "non-traditional" HMO-enrolled populations. The study also addressed use of non-physician providers and provided overall staffing data where available.

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HAWAII USES FEWER GENERALIST PHYSICIAN AND NON-PHYSICIAN PROVIDERS

The Hawaiian health care system is unique. Almost all its population is covered by some form of health insurance. The health status of Hawaiians is higher than that of mainland residents. This project examined the impact of the Hawaiian Prepaid Health Care Act (PPHCA) on the supply, employment, utilization, and specialty distribution of health personnel in Hawaii and compared these findings with the United States at large. In order to evaluate changes in the Hawaiian health care system from

1970-1993 and the impact of the PPHCA, personnel, demographic, and health status data were collected from Federal, State, and private sources. Data analysis was supplemented with structured interviews with knowledgeable people to shed light on some of the findings and further assess the impact of PPHCA. While it was hypothesized that there would be considerable growth in the supply of generalist physicians and non-physician providers, the results demonstrated otherwise. The

number and percentage of specialists grew at a faster pace in Hawaii than in the U.S. and the utilization of non-physician providers continued to lag behind that of the nation overall.

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email:stise@hrsa.ssw.dhhs.gov; or Kunitz and Associates Inc.; PH:301 770-2730/FAX:301 770-4183**

FUNDED RESEARCH *continued*

JOHNS HOPKINS RESEARCHER IMPROVES HIS HMO STAFFING ADJUSTMENTS

There have been a number of studies that have estimated requirements for physicians in a health care system dominated by managed care. In 1993, Dr. Jonathan Weiner conducted one such study in which physician requirements were developed through the year 2000, adjusting current staffing patterns for such factors as the difference in demographic characteristics between HMO enrollees and non-HMO populations, and the utilization of non-staff physicians in the provision of care to HMO enrollees (i.e., enrollment of non-traditional populations and out-of-plan use of services). This more recent study used more detailed and timely data to formulate the adjustment factors and developed ranges for those factors. In addition, adjustment factors for broad specialty groupings were developed beyond the year 2000 to 2020.

Projections of requirements were then generated for a health care delivery system in which the entire population would be enrolled in HMOs. In comparison to supply projections formulated by the Bureau based on maintaining current physician production, these new requirement forecasts reveal that the excess of specialists is expected to continue to grow while a possible future shortage of generalists may develop.

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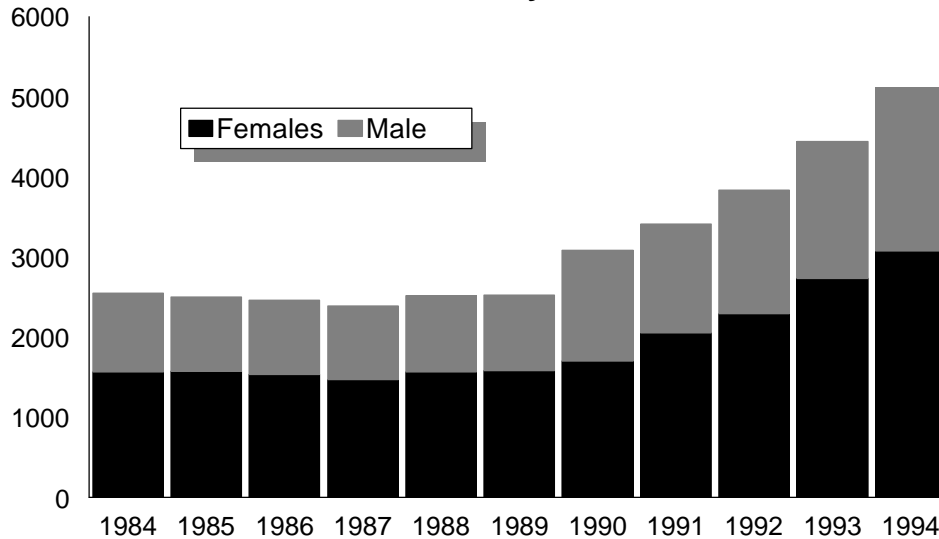
APHA ANNUAL MEETING

On October 29-November 2, 1995 in San Diego, California, the American Public Health Association (APHA) will host its 123rd Annual Meeting and Exhibition. Policy makers, health professionals, and other leaders will need to make tough decisions affecting public health priorities and ethics in this changing health care environment. This year's four-day conference, entitled "Decision Making in Public Health: Priorities, Power, and Ethics" will feature over 800 scientific sessions and special theme sessions; the APHA Exhibition, where over 400 organizations display important products and services; the APHA Job Placement Service; and many other special events. This conference is considered one of the most important public health events of the year.

For additional information: APHA Convention Hotline; PH:(202) 789-5646; or write: American Public Health Association, Annual Meeting Registrar, Dept. 5037, Washington, DC, 20061-5037.

Enrollment of PAs has doubled since 1989. The representation of females has remained constant over those years at 60%.

Estimated Physician Assistants Enrollment by Gender



Source: APAP

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service
Health Resources and Services Administration
Office of Research and Planning, BHP/HRSA
Workforce Analysis and Research Branch
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